AMENDMENTS TO THE CLAIMS

1. (Original) A polymer comprising a phenolic monomeric unit wherein the phenyl group of the phenolic monomeric unit is substituted by a group having the structure -S-(L)$_k$-Q wherein S is covalently bound to a carbon atom of the phenyl group, wherein L is a linking group, k is 0 or 1 and Q comprises a heterocyclic group.

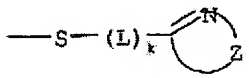
2. (Original) A polymer according to claim 1 wherein said heterocyclic group is aromatic.

3. (Previously Presented) A polymer according to claim 1 wherein said heterocyclic group contains at least one nitrogen atom in the ring of the heterocyclic group.

4. (Previously Presented) A polymer according to claim 1 wherein said heterocyclic group has a 5- or 6- membered ring structure, and is optionally annelated with another ring system.

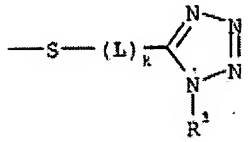
5. (Previously Presented) A polymer according to claim 1 wherein the heterocyclic group is selected from an optionally substituted tetrazole, triazole, thiadiazole, oxadiazole, imidazole, benzimidazole, thiazole, benzthiazole, oxazole, benzoxazole, pyrazole, pyrrole, pyrimidine, pyrasine, pyridasine, triazine or pyridine group.

6. (Previously Presented) A polymer according to claim 1 wherein -S-(L)$_k$-Q comprises the following formula



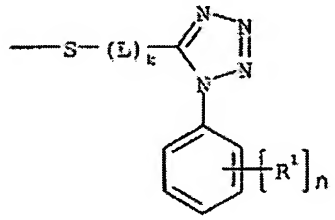
wherein Z represents the necessary atoms to form a 5- or 6- membered heterocyclic aromatic group, and is optionally annelated with another ring system.

7. (Original) A polymer according to claim 6 wherein the -S-(L)$_k$-Q comprises the following formula



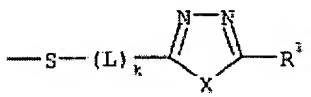
wherein R^1 is selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

8. (Previously Presented) A polymer according to claim 6 wherein -S-(L)$_k$-Q comprises the following formula



wherein n is 0, 1, 2, 3, 4 or 5, wherein each R^1 is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, -$S0_2$-NH-R,-NH-$S0_2$-R,-CO-NR-R,-NR-CO-R, -NR^2-CO-NR^3-R^4, -NR^2-CS-NR^3-R^4, -NR^2-CO-O-R^3, -O-CO-NR^2-R^3, -O-CO-R^5, -CO-O-R^2, -CO-R^2, -SO_3-R^2, -O-SO_2-R^5, -SO^2-R^2, -SO-R^5, -P(=O)(-O-R^2)(-O-R^3), -O-P(=O)(-O-R^2)(-O-R^3), -NR^2-R^3, -O-R^2, -S-R^2, -CN, -NO_2 or -M-R^2, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, where in R^2 to R^4 are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R^5 is an optionally substituted alkyl, alkenyl, alknyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1, R^2, R^3, R^4 and R^5 together represent the necessary atoms to form a cyclic structure.

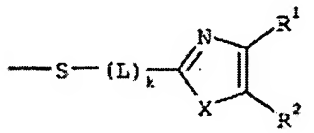
9. (Previously Presented) A polymer according to claim 6 wherein -S-(L)$_k$-Q comprises the following formula



wherein X is 0, S or NR^3, wherein R is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl

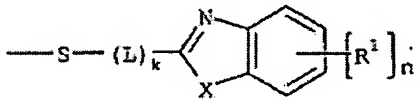
group, halogen or -L^1-R^2, where in L^1 is a linking group, wherein R^2 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or -CN, wherein R^3 is selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from R^1, R^2 and R^3 represent the necessary atoms to form a cyclic structure.

10. (Previously Presented) A polymer according to claim 6 wherein -S-$(L)_k$-Q comprises the following formula



wherein X is O, S or NR^4, wherein R^1 and R^2 are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or -L1-R3 wherein L^1 is a linking group, wherein R^3 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or -CN, wherein R^4 is selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from R^1, R^2, R^3 and R^4 together represent the necessary atoms to form a cyclic structure.

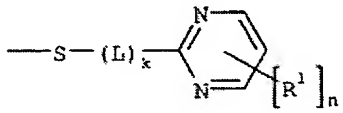
11. (Previously Presented) A polymer according to claim 6 wherein -S-$(L)_k$-Q comprises the following formula



wherein n is 0, 1, 2, 3 or 4, wherein X is O, S or NR^5, wherein each R^1 is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, -SO_2-NH-R^2, -NH-SO_2-R^6, -CO-NR^2-R^3, -NR^2-CO-R^6, -NR^2-CO-NR^3-R^4, -NR^2-CS-NR^3-R^4, -NR^2-CO-O-R^3, -O-CO-NR^2-R^3, -O-CO-R^6, -CO-O-R^2, -CO-R^2, -SO_3-R^2, -O-SO_2-R^6, -SO_2-R^2, -SO-R^6, -P(=o)(-O-R^2)(-O-R^3), -O-P(=O)(-O-R^2)(-O-R^3), -NR^2-R^3, -O-R^2, -S-R^2,

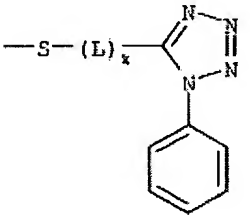
-CN, -NO_2 or -M-R^2, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R^2 to R^5 are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R^6 is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1, R^2, R^3, R^4, R^5 and R^6 represent the necessary atoms to form a cyclic structure.

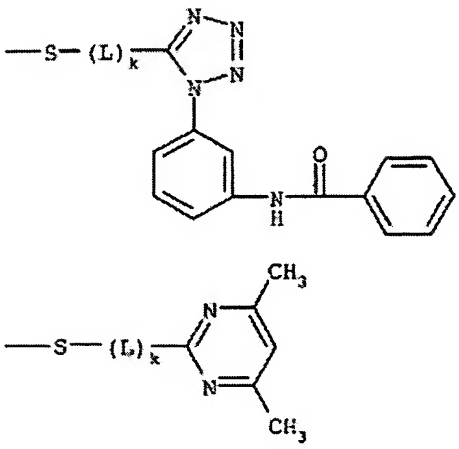
12. (Previously Presented) A polymer according to claim 6 wherein -S-$(L)_k$-Q comprises the following formula



wherein n is 0, 1, 2 or 3, wherein each R^1 is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, -SO_2-NR-R^2, -NR-SO_2-R^5, -CO-NR^2-R^3, -NR^2-CO-R^5, -NR^2-CO-NR^3-R^4, -NR^2-CS-NR^3-R^4, -NR^2-CO-O-R3, -O-CO-NR^2-R^3, -O-CO-R^5, -CO-O-R^2, -CO-R^2, -SO_3-R^2, -O-SO_2-R^5, -SO_2-R^2, -SO-R^5, -P(=O)(-O-R^2)(-O-R^3), -O-P(=O)(-O-R^2)(-O-R^3), -NR^2-R^3, -O-R^2, -S-R^2, -CN, -NO_2 or -M-R^2, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R^2 to R^4 are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R^5 is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1, R^2, R^3, R^4 and R^5 together represent the necessary atoms to form a cyclic structure.

13. (Previously Presented) A polymer according to claim 6 wherein -S-$(L)_k$-Q comprises one of the following formula:





14. (Previously Presented) A polymer according to claim 1, wherein said polymer comprising a phenolic monomeric unit is a novolac, resol or polyvinylphenol.

15. (Previously Presented) A heat-sensitive lithographic printing plate precursor comprising a support having a hydrophilic surface and an oleophilic coating provided on the hydrophilic surface, said coating comprising an infrared light absorbing agent and a polymer comprising a phenolic monomeric unit wherein the phenyl group of the phenolic monomeric unit is substituted by a group having the structure -S-$(L)_k$-Q wherein S is covalently bound to a carbon atom of the phenyl group, wherein L is a linking group, k is 0 or 1 and Q comprises a heterocyclic group.

16. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 15, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

17. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 16, wherein said dissolution inhibitor is selected from the group consisting of

[[-]] an organic compound which comprises at least one aromatic group and a hydrogen bonding site,

[[-]] a polymer or surfactant comprising siloxane orperfluoroalkyl units and mixtures thereof.

18. (Canceled)

19. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 15, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

20. (Canceled)

21. (Previously Presented) A polymer according to claim 2 wherein said heterocyclic group contains at least one nitrogen atom in the ring of the heterocyclic group.

22. (Previously Presented) A polymer according to claim 2 wherein said heterocyclic group has a 5- or 6- membered ring structure, and is optionally annelated with another ring system.

23. (Previously Presented) A polymer according to claim 3 wherein said heterocyclic group has a 5- or 6- membered ring structure, and is optionally annelated with another ring system.

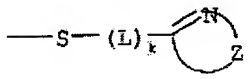
24. (Previously Presented) A polymer according to claim 3 wherein said heterocyclic group has a 5- or 6- membered ring structure, and is annelated with another ring system.

25. (Previously Presented) A polymer according to claim 24 wherein the heterocyclic group is selected from an optionally substituted tetrazole, triazole, thiadiazole, oxadiazole, imidazole, benzimidazole, thiazole, benzthiazole, oxazole, benzoxazole, pyrazole, pyrrole, pyrimidine, pyrasine, pyridasine, triazine or pyridine group.

26. (Previously Presented) A polymer according to claim 5, wherein said polymer comprising a phenolic monomeric unit is a novolac, resol or polyvinylphenol.

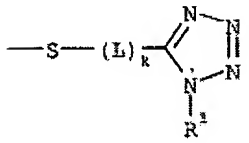
27. (Currently Amended) A ~~polymer~~ heat-sensitive lithographic printing plate precursor according to claim 15 wherein the heterocyclic group is selected from an optionally substituted tetrazole, triazole, thiadiazole, oxadiazole, imidazole, benzimidazole, thiazole, benzthiazole, oxazole, benzoxazole, pyrazole, pyrrole, pyrimidine, pyrasine, pyridasine, triazine or pyridine group.

28. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 15 wherein -S-(L)$_k$-Q comprises the following formula



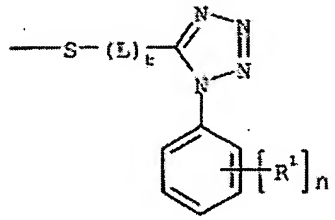
wherein Z represents the necessary atoms to form a 5- or 6- membered heterocyclic aromatic group, and is optionally annelated with another ring system.

29. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein the -S-(L)$_k$-Q comprises the following formula



wherein R^1 is selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

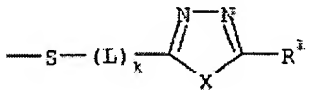
30. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein -S-(L)$_k$-Q comprises the following formula



wherein n is 0, 1, 2, 3, 4 or 5, wherein each R^1 is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, -SO_2-NH-R,-NH-SO_2-R,-CO-NR-R,-NR-CO-R, -NR^2-CO-NR^3-R^4, -NR^2-CS-NR^3-R^4, -NR^2-CO-O-R^3, -O-CO-NR^2-R^3, -O-CO-R^5, -CO-O-R^2,

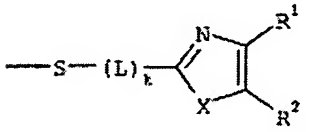
$-CO-R^2$, $-SO_3-R^2$, $-O-SO_2-R^5$, $-SO^2-R^2$, $-SO-R^5$, $-P(=O)(-O-R^2)(-O-R^3)$, $-O-P(=O)(-O-R^2)(-O-R^3)$, $-NR^2-R^3$, $-O-R^2$, $-S-R^2$, -CN, $-NO_2$ or $-M-R^2$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, where in R^2 to R^4 are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R^5 is an optionally substituted alkyl, alkenyl, alknyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1, R^2, R^3, R^4 and R^5 together represent the necessary atoms to form a cyclic structure.

31. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein $-S-(L)_k-Q$ comprises the following formula



wherein X is 0, S or NR^3, wherein R is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or $-L^1-R^2$, where in L^1 is a linking group, wherein R^2 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or -CN, wherein R^3 is selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from R^1, R^2 and R^3 represent the necessary atoms to form a cyclic structure.

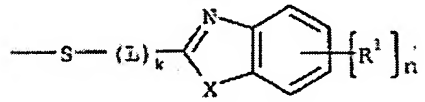
32. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein $-S-(L)_k-Q$ comprises the following formula



wherein X is O, S or NR^4, wherein R^1 and R^2 are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or -L1-R3 wherein L^1 is a linking group, wherein R^3 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or -CN, wherein R^4 is

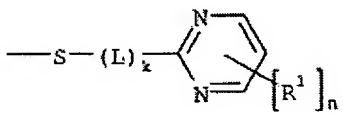
selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from R^1, R^2, R^3 and R^4 together represent the necessary atoms to form a cyclic structure.

33. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein -S-$(L)_k$-Q comprises the following formula



wherein n is 0, 1, 2, 3 or 4, wherein X is O, S or NR^5, wherein each R^1 is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, -SO_2-NH-R^2, -NH-SO_2-R^6, -CO-NR^2-R^3, -NR^2-CO-R^6, -NR^2-CO-NR^3-R^4, -NR^2-CS-NR^3-R^4, -NR^2-CO-O-R^3, -O-CO-NR^2-R^3, -O-CO-R^6, -CO-O-R^2, -CO-R^2, -SO_3-R^2, -O-SO_2-R^6, -SO_2-R^2, -SO-R^6, -P(=o)(-O-R^2)(-O-R^3), -O-P(=O)(-O-R^2)(-O-R^3), -NR^2-R^3, -O-R^2, -S-R^2, -CN, -NO_2 or -M-R^2, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R^2 to R^5 are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R^6 is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1, R^2, R^3, R^4, R^5 and R^6 represent the necessary atoms to form a cyclic structure.

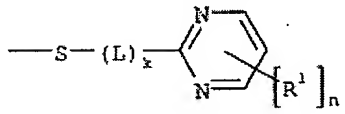
34. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein -S-$(L)_k$-Q comprises the following formula



wherein n is 0, 1, 2 or 3, wherein each R^1 is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, -SO_2-NR-R^2, -NR-SO_2-R^5, -CO-NR^2-R^3, -NR^2-CO-R^5, -NR^2-CO-NR^3-R^4, -NR^2-CS-NR^3-R^4, -NR^2-CO-O-R3, -O-CO-NR^2-R^3,

-O-CO-R^5, -CO-O-R^2, -CO-R^2, -SO_3-R^2, -O-SO_2-R^5, -SO_2-R^2, -SO-R^5, -P(=O)(-O-R^2)(-O-R^3), -O-P(=O)(-O-R^2)(-O-R^3), -NR^2-R^3, -O-R^2, -S-R^2, -CN, -NO_2 or -M-R^2, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R^2 to R^4 are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R^5 is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1, R^2, R^3, R^4 and R^5 together represent the necessary atoms to form a cyclic structure.

35. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein -S-$(L)_k$-Q comprises the following formula



wherein n is 0, 1, 2 or 3, wherein each R^1 is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, -SO_2-NR-R^2, -NR-SO_2-R^5, -CO-NR^2-R^3, -NR^2-CO-R^5, -NR^2-CO-NR^3-R^4, -NR^2-CS-NR^3-R^4, -NR^2-CO-O-R3, -O-CO-NR^2-R^3, -O-CO-R^5, -CO-O-R^2, -CO-R^2, -SO_3-R^2, -O-SO_2-R^5, -SO_2-R^2, -SO-R^5, -P(=O)(-O-R^2)(-O-R^3), -O-P(=O)(-O-R^2)(-O-R^3), -NR^2-R^3, -O-R^2, -S-R^2, -CN, -NO_2 or -M-R^2, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R^2 to R^4 are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R^5 is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1, R^2, R^3, R^4 and R^5 together represent the necessary atoms to form a cyclic structure.

36. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 16 wherein the heterocyclic group is selected from an optionally substituted tetrazole, triazole, thiadiazole, oxadiazole, imidazole, benzimidazole, thiazole, benzthiazole, oxazole, benzoxazole, pyrazole, pyrrole, pyrimidine, pyrasine, pyridasine, triazine or pyridine group.

37. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 19 wherein the heterocyclic group is selected from an optionally substituted tetrazole, triazole, thiadiazole, oxadiazole, imidazole, benzimidazole, thiazole, benzthiazole, oxazole, benzoxazole, pyrazole, pyrrole, pyrimidine, pyrasine, pyridasine, triazine or pyridine group.

This listing of claims replaces all prior versions, and listings, of claims in the application.